



(19)

(11) Publication number:

02178012

Generated Document.

PATENT ABSTRACTS OF JAPAN(21) Application number: **63331981**(51) Intl. Cl.: **B29C 45/26 B29C 45/16**(22) Application date: **29.12.88**

(30) Priority:

(43) Date of application
publication: **11.07.90**(84) Designated contracting
states:(71) Applicant: **NISSEI PLASTICS IND CO**(72) Inventor: **TAKAYAMA KAZUTOSHI**

(74) Representative:

**(54) INJECTION MOLD
ASSEMBLY**

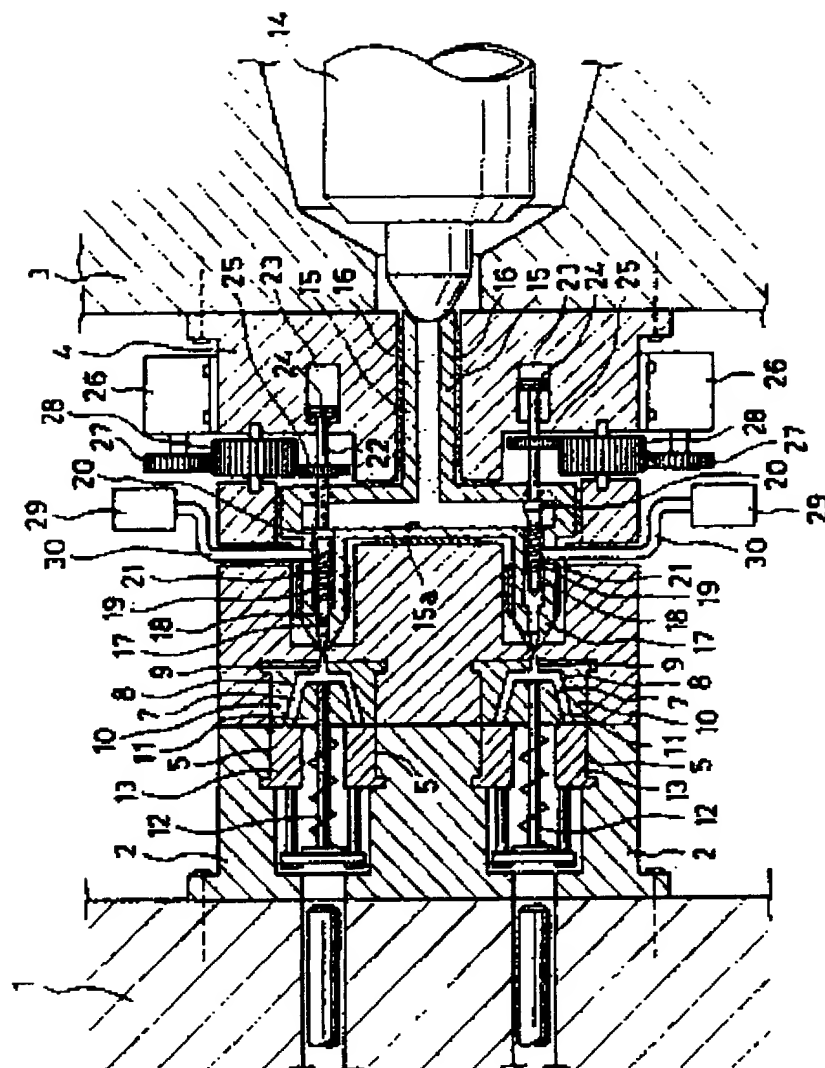
(57) Abstract:

PURPOSE: To make it possible to injection-mold molded items, which are colored different from each other in every cavity, by a structure wherein a kneading member equipped with a screw is rotatably and reciprocatably provided in the interior of each nozzle part and a colorant fed pipe is arranged so as to feed colorant to the kneading member.

CONSTITUTION: Molten resin having natural color is filled from an injection tube 14 in a hot runner 15a. After that, by pressurizing each cylinder 23, each kneading member 21 is moved forward together with each piston rod 22 so as to fit the plunger tip of the kneading member 21 to each small diameter portion and to fit each spool part 20 to the rear end of each nozzle part in order to turn the interior of the nozzle part into one enclosed kneading chamber.

After that, slight pressure is applied in opposite direction to each cylinder 23 so as to slightly retreat each piston 24 together with the kneading member 21. Since the pressure in the nozzle member 21 decreases as a result and the un-even density portion is developed, colorant by the amount for one shot is fed to the portion from each colorant feeding device 29. After that, by turning the kneading member 21 together with the piston 24 through the actuation of each motor 26, the molten resin and the colorant are kneaded together with each screw 19 so as to be turned into molten colored resin.

COPYRIGHT: (C)1990,JPO&Japio



EUROPEAN PATENT OFFICE

Patent Abstracts of Japan

PUBLICATION NUMBER : 02178012
PUBLICATION DATE : 11-07-90

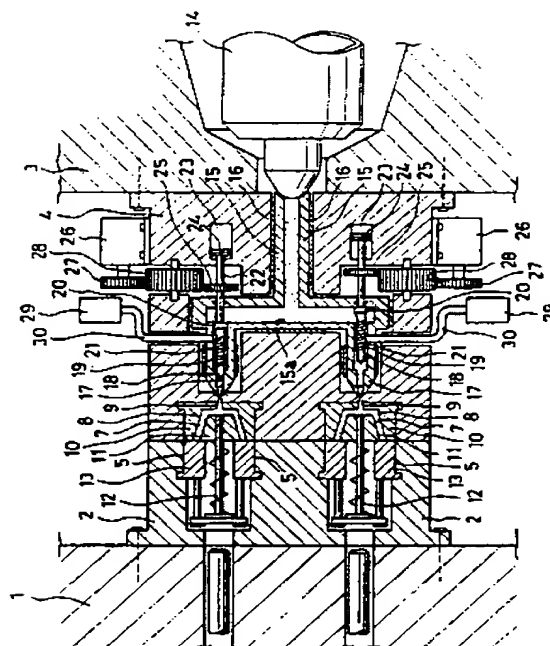
APPLICATION DATE : 29-12-88
APPLICATION NUMBER : 63331981

APPLICANT : NISSEI PLASTICS IND CO;

INVENTOR : TAKAYAMA KAZUTOSHI;

INT.CL. : B29C 45/26 B29C 45/16

TITLE : INJECTION MOLD ASSEMBLY



ABSTRACT : **PURPOSE:** To make it possible to injection-mold molded items, which are colored different from each other in every cavity, by a structure wherein a kneading member equipped with a screw is rotatably and reciprocatably provided in the interior of each nozzle part and a colorant fed pipe is arranged so as to feed colorant to the kneading member.

CONSTITUTION: Molten resin having natural color is filled from an injection tube 14 in a hot runner 15a. After that, by pressurizing each cylinder 23, each kneading member 21 is moved forward together with each piston rod 22 so as to fit the plunger tip of the kneading member 21 to each small diameter portion and to fit each spool part 20 to the rear end of each nozzle part in order to turn the interior of the nozzle part into one enclosed kneading chamber. After that, slight pressure is applied in opposite direction to each cylinder 23 so as to slightly retreat each piston 24 together with the kneading member 21. Since the pressure in the nozzle member 21 decreases as a result and the un-even density portion is developed, colorant by the amount for one shot is fed to the portion from each colorant feeding device 29. After that, by turning the kneading member 21 together with the piston 24 through the actuation of each motor 26, the molten resin and the colorant are kneaded together with each screw 19 so as to be turned into molten colored resin.

COPYRIGHT: (C)1990,JPO&Japio